

Patient shadowing as an ethnographic study of staff and patient experience to influence daycase surgery outcomes

William Calvert¹, Gethin Hopkins², Carol Platt³

1. Department of Paediatric Surgery, Alder Hey Children's Hospital, Liverpool, United Kingdom
2. University of Liverpool Medical School, Liverpool, United Kingdom
3. Innovation Service, Alder Hey Children's NHS Foundation Trust, Liverpool, United Kingdom

To Cite: Calvert W, Hopkins G, Platt, C. Patient shadowing as an ethnographic study of staff and patient experience to influence daycase surgery outcomes. JHD. 2018;3(4):144–147. <https://doi.org/10.21853/JHD.2018.62>

Corresponding Author:

William John Calvert
Department Of Paediatric Surgery,
Alder Hey Children's Hospital
Liverpool, UK
william.calvert@nhs.net

Copyright:

© 2018 The Authors. Published by Archetype Health Pty Ltd.. This is an open access article under the [CC BY-NC-ND 4.0 license](https://creativecommons.org/licenses/by-nc-nd/4.0/).

SUMMARY

Patient shadowing can be a valid tool in service evaluation and audit. Performed in large numbers it generates qualitative big data that can be used to increase understanding of patient pathways and experience. Increasing understanding of processes allows for focused improvements targeted to recurring issues and allows systemic understanding of patient experience and a new appreciation of how to assess outcomes from observational reports.

Key Words

Patient shadowing; qualitative research; pathway design; patient experience

INTRODUCTION

Within health care, the patient experience is one area that can easily be assessed through patient shadowing. Patient shadowing is a recognised methodology for assessing and demonstrating patient- and family-centred care.¹ Through the development of a large scale patient shadowing program for medical students called Improving Experience through Regular Shadowing Events (ImERSE) within our paediatric surgery daycase theatre,² we have discovered more about the power and potential of patient shadowing to drive patient-centred change.

SUMMARY

Starting in January 2014 we have had medical students shadowing paediatric patients through daycase surgery. Following the established principles of patient shadowing, the students record observation of touchpoints along the care pathway. The number of shadowing events that have occurred (>1,000) has allowed us to develop a comprehensive and detailed understanding of our daycase surgical unit. Through quantitative and qualitative analysis we can generate care timelines/pathways against which we can map future events. Analysis of interactions and experiences allows us to drive population-specific changes to our daycase service.

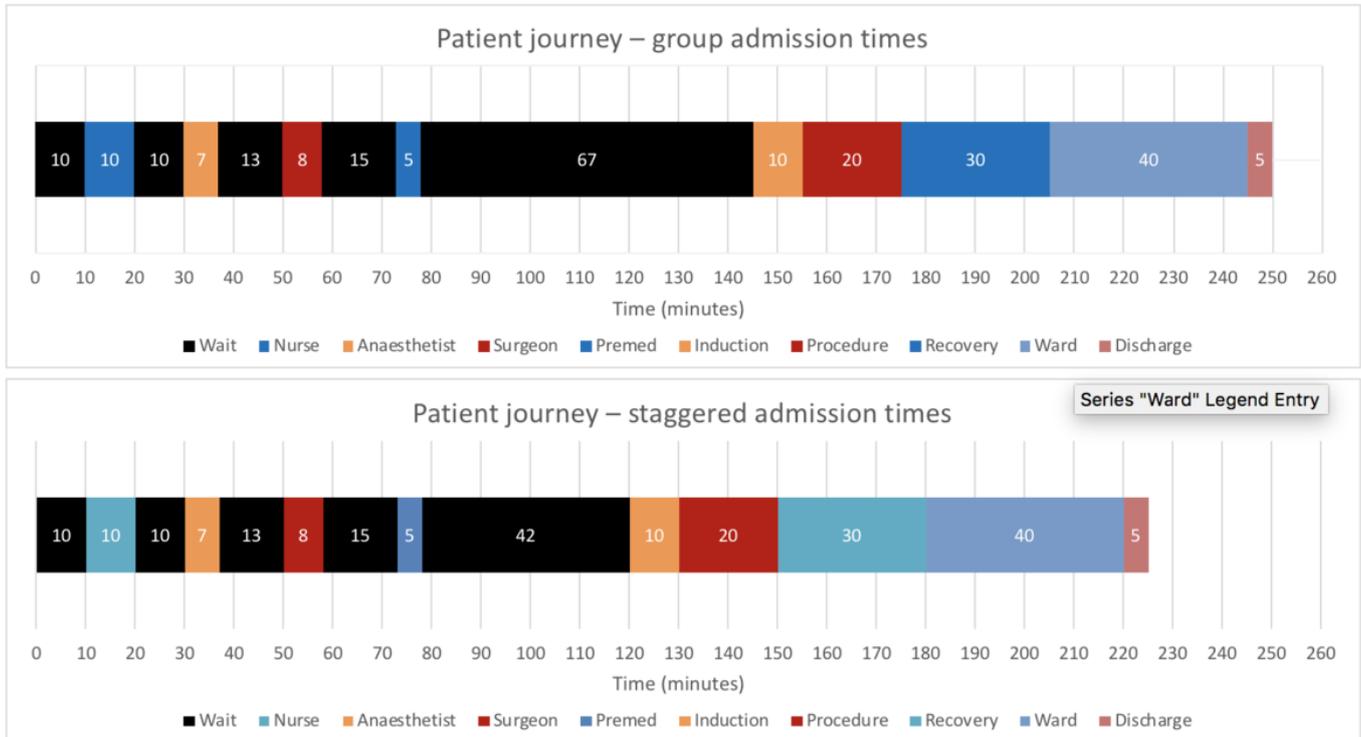
LESSONS LEARNED

The learning outcomes from our patient shadowing program ImERSE have been widespread and welcome. The primary learning point is that patient shadowing can be performed on a large scale within health care with beneficial outcomes to patients, staff, and shadowers. Patient shadowing demonstrates the qualitative methodology of ethnography and as such its observations should be given the same qualitative respect.

Patient shadowing can be used to record whatever measures of practice are required. We chose to collect time-stamped observations of patient and caregiver interactions within our daycase surgical department. Observations are anonymised, with episode identifiers only being time and date. From collated observations we have been able to

produce a quantitative analysis of the average daycase pathway and from this demonstrate reductions in admission time through the implementation of staggered admission times in our new hospital (Figure 1).

Figure 1: Quantitative comparative measures of admission strategies



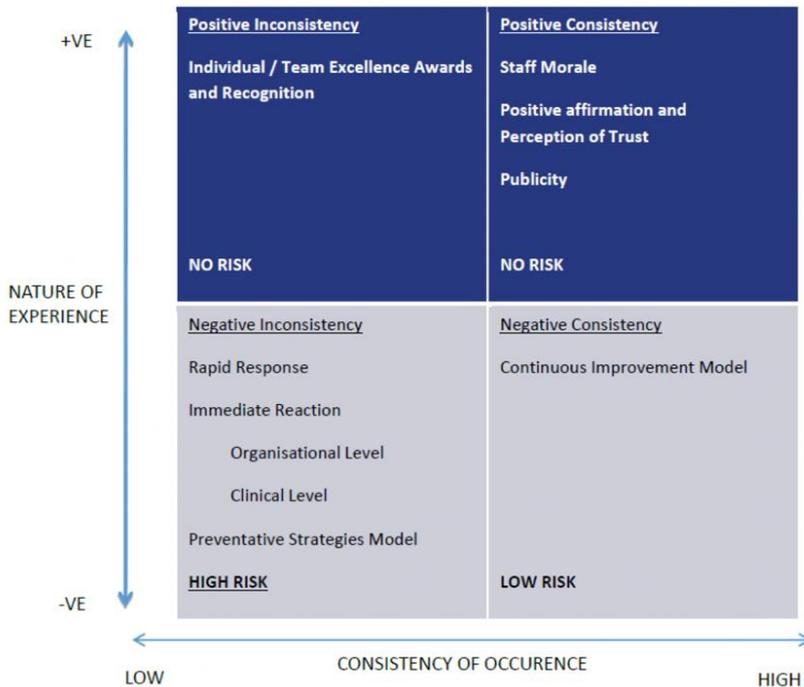
Qualitative analysis of the written observation is done by two strategies. The first uses simple thematic analysis of observation. Thematic analysis of large volumes of qualitative data relies on analyser integrity and past experience but becomes easier with time as themes become established. Volume of observation has also led us to realise that patient experience can be plotted into a new quality matrix where event repetition and event positivity are the measures. Figure 2 demonstrates this model and the outcomes arising from the four newly appreciated area of quality findings. The second analytical method is through word co-occurrence using both “common” and “abnormal” to identify observations requiring closer scrutiny.

Patient shadowing can also be used as an audit tool. If there are set standards along the care pathway under observation, their occurrence can be audited. We have used patient shadowing as an audit tool to assess compliance with the WHO surgical safety checklist and with a local anaesthetic “stop before you block” local safety policy.

The uniqueness of patient shadowing as a service improvement tool is that its outcomes are specific to the population shadowed. Although shadowing outcomes may not be generalisable across different trusts, they are important measures of what your population wants and give you the incentive to implement population specific changes.

ImERSE originally started as a quality improvement tool for service evaluation. Our most significant nonclinical finding surrounds the power of patient shadowing as a medical education tool. After our first year we were struck by some of the statements the students were making about their learning outcomes. Following an in-depth review of the recorded observation and a look at the educational principles we could demonstrate through patient shadowing, we realised that it could form an important tool in helping medical students understand the demonstration and development of empathy. This has been specifically brought into the later academic year modules as a learning outcome along with clarification of patient- and family-centred care principles.

Figure 2: Quality improvement outcome matrix



Identifiable changes we have made that have improved patient care involve education of staff around the importance of explanations of pre-meds to patients and continuing, clear communication. This initially arose from an abnormal word co-occurrence of “random drug”, which was how a parent referred to the pre-medication their child had just been administered. Since feeding this back to the daycase staff the occurrence hasn’t happened again. Serial patient shadowing allows monitoring of changes made to practice and continues to demonstrate their longevity.

Serialised data can also be fed back to staff about the observed and reflected positivity of their practice allowing staff morale to be boosted and positive experiences reinforced.

An important message for other practitioners is about the power of observations gained through patient shadowing. The scale of shadowing doesn’t matter. Small-scale shadowing can reveal just as important observations through which service improvement can be driven as large-scale interventions such as ours. The technique can also be used in any care setting and anyone can shadow. The clinical experience of the observer changes the reflections on the events seen and powerful service change data can also be achieved from nonclinical observers.

CLINICIAN INSIGHT

Many years ago, my psychology professor divided our class into one group that was assigned to spend 12 hours in a wheelchair, and one group that was assigned to be the assistants to those in wheelchairs. After one day, the groups switched, so that each of us had the experience of spending a day dealing with the many large and small frustrations and indignities of those with limited mobility. The experience left a huge impression on most of us, who had never in our young healthy lives given much thought to the patient journey of those in wheelchairs. As the professor hoped, the experience taught us insight and empathy, which she hoped would serve us well in whatever future career we chose. It certainly helped me when I entered the nursing profession a few years later.

As the authors of this article note, patient shadowing has significant power and potential to drive patient-centred change. When the shadowing is led by clinicians-in-training, there is also potential to build compassion and empathy, as clinicians doing the shadowing may have little experience as patients, and the experience of care becomes much more

real when it is observed up close for hours at a time. Additionally, as the authors note, patient safety can be enhanced by patient shadowing, which may identify and prevent errors and potential errors or miscommunications. While the length of time our patients spend waiting is not always a safety concern, it is an area of health care that needs quality improvement interventions, and data collected during shadowing programs are important in informing quality improvement and research projects. Programs that train healthcare professionals of all descriptions, not solely medical students, should consider incorporating some elements of patient shadowing into their programs. As the authors note, these programs benefit all parties: patients, staff, and shadowers.

Agnes Black

Director, Health Services & Clinical Research and Knowledge Translation

Professional Practice Office

Providence Health Care

Vancouver, BC

Canada

REFERENCES

1. DiGioia A, Greenhouse PK, Levison TJ. Patient and family-centered collaborative care: an orthopaedic model. *Clin Orthop Relat Res.* 2007 Oct;463:13-9.
2. Calvert W, Minford J, Platt C, et al. ImERSE (Improving Experience through Regular Shadowing Events). *BMJ Qual Improv Rep.* 2015:Aug 19;4(1).

ACKNOWLEDGEMENTS

The authors acknowledge The Point of Care Foundation for their support in our PFCC programs in Alder Hey and providing our initial shadowing training.

PEER REVIEW

Not commissioned. Externally peer reviewed.

CONFLICTS OF INTEREST

The authors declare that they have no competing interests.

FUNDING

None

ETHICS COMMITTEE APPROVAL

None